# Bachelor in Management Information Systems

## Course Descriptions

### Programme Compulsory Courses

**BA 109 – Principles of Management (2) E**
The course deals with the concepts of the organization, its characteristics and legal forms. This course focuses on the provision of a comprehensive understanding of the organization functions (production, marketing, finance, human resource, knowledge & information and management). Additionally, it covers the organization's relationship with the surrounding environment.
**(Prerequisite: BA 108)**

**ACF 151 – Financial Management I**
This course will introduce students to the concepts and tools of financial management. The focus of the course is decision making in a financial context. It therefore examines the techniques that are used in businesses to make decisions that are consistent with the efforts to increase the wealth of the owners of the business in a corporate environment. The topics covered include but not limited to the valuation of future cash flows, the valuation of stocks and bonds, capital budgeting, risk and return and long term financing.
**(Prerequisite: ACF 101)**

**MIS 211 – Management Information Systems**
This is a major introduction course that presents problems in business environment and solution with computer based tools. It focuses on systems and information systems concepts and technologies. Students will learn the most effective ways to use information systems.
**(Prerequisite: CS 104 + BA 108)**

**MIS 231 – Programming and Data Structure**
This course introduces the students to the concepts of structured programming. It also introduces them to data structures types and the primitive operations associated with each type. Topics to be covered in this course are: Algorithms, C++ Programing language tools (Input Output, Selection, Repetition, Methods and Matrixes), Data structures types (Linked list, Stacks, Queues and tress), and the primitive operation associated with them and their uses.
**(Prerequisite: CS 104)**

**MIS 332 – Visual Programming**
This course introduces students to the concepts of Visual programming, its usage and elements. The student will learn how to program with Visual Basic programming language this includes User interface elements, such as menu, dialog boxes, text boxes, commands boxes, etc. Also the student will learn how to program using loops and selections statement, and to link the visual basic projects with databases.
**(Prerequisite: MIS 231)**

**BA 238 – Human Resources Management (E)**
This course is an introductory course for Human Resource Management (HRM), it is designed to cover the major topics and issues related to HRM which will help the student in understanding and analysing the role that HRM plays in formulating and implementing organizational strategy, and in achieving overall organizational efficiency and effectiveness. The course exposes students to HRM concepts, objectives, and functions. It also looks at diverse challenges that face HRM in its environment. Additionally, the course focuses on the scope of HRM in terms of job analysis, Human resources planning and recruiting, selection, training, performance appraisal and compensation.
**(Prerequisite: BA 109)**

### BA 241 – Quantitative Methods in Management E

This course provides an introduction to the concepts and applications of quantitative methods in management. It develops mathematical and statistical competence necessary to facilitate progression in courses such as Operations Management and Business Decision Making, however this course builds on the concepts and analytical taught in Principle of Statistics (STA 101). This course focuses on developing quantitative methods, such as, linear programming, sensitivity and duality theory, transportation and assignment problems, network and queuing theory in addition to waiting line, game theory and simulation. Quantitative methods are used throughout business, government and non-profit sector of the economy. An effective participation in decision-making must be able to understand and interpret statistical data.
(Prerequisite: STA 101)

### MIS 240 – Information Systems Infrastructures

This course introduces the students to the Information Technology infrastructure needed for using and implementing the information systems. Topics related to operating systems (structure, functionality, types, & Security), Computer Networks (Component, Protocols, and Applications), Cloud computing, and Data centers are to be covered in this course.
(Prerequisite: MIS 231)

### MIS 251 – Information Resources Management

The course aims to introduce to the student how the information resources are managed in a business corporate. The material covered in this course includes the impact of IT on Business, the IT strategy, the IT Governance, IT processes. It planning, the CIO and his roles in Business, and IT organization.
(Prerequisite: MIS 211)

### MIS 312 – E- Decision Support Systems

The aim of this course is to explore the area of decision support systems and investigate the fundamental techniques associated with them to support decision- making process. Also to develop the understanding of the methodologies, technologies, and modeling used in Decision Support Systems and Business Intelligence.
(Prerequisite: MIS 211)

### MIS 314– Integrated Information Systems

This course aims to develop knowledge and understanding of concepts of systems integration together with the information systems (Supply Chain Managements and Customer Relationship Management), Enterprise Resource Planning Systems (ERP). The students will learn about the characteristics, benefits, weaknesses and areas of application of all the mentioned systems. The course also introduces to the students the SAP/R/ R3 or BIPA ERP system as an example for ERP systems.
(Prerequisite: MIS 211)

### MIS 321 – Information Systems Analysis

This course introduces students to information systems analysis and provides Skills in Information Systems requirements analysis and logical system Specifications. The student will learn several systematic approaches and tools for the analysis process management. The students will also learn techniques that will allow them to analyze systems in a team environment
(Prerequisite: MIS 344)

### MIS 344– Introduction to Database Systems

This course introduces topics that include the traditional files problems, database systems concepts, database systems evolution, database types, entity, attributes, relationship, and relationship degree, database architecture, database modeling methods, data definition and manipulation languages, SQL.
 (Prerequisite: MIS 240))

### MIS 343 – Information Systems Security

This course covers various topics to the security principles and practices for information systems. Topics include basic information security concepts, common attacking techniques, basic cryptographic tools, authentication and access control. The course extended to include topics related to information systems security such as malicious software, common security policies and management, physical security, and legal and ethical issues in information systems security.
**(Prerequisite: MIS 240)**

### BA 349 – Operations Management (E)

The course is designed to provide students with the knowledge and skills relevant with the efficient transformation of inputs (materials, labor, capital and management) into outputs (products or services) in a manner that explores the firm value propositions to its customers and complies with the business strategy of this firm. Topics include product selection & design, capacity planning, process selection, facilities location and design, scheduling, aggregate production planning, and Material Requirements Planning (MRP), and Modern Manufacturing Systems and Future Plant.
**(Prerequisite: BA 109 + BA 241)**

### MIS 255 – Knowledge Based Management

This course introduces students the concepts of Knowledge management and forces driving knowledge management Systems. Students will learn about the issues in knowledge management, knowledge management systems solutions and foundation, knowledge organizations, knowledge management systems infrastructure, knowledge management systems technologies, developing knowledge application systems, and types of knowledge application systems.
**(Prerequisite: MIS 211)**

### MIS 356–Information Systems Auditing

This course introduces the fundamental concepts of the information systems audit and control function. The main focus of this course is on understanding auditing controls, the types of controls and their impact, and how to manage and audit them. The concepts and techniques used in information technology and information systems audits will be presented. Students will learn audit management; dealing with best practices, standards, and regulatory requirements governing information and controls is addressed.
**(Prerequisite: MIS 211)**

### MIS 361– E-Business

This course aims to covers the concepts related to e-Business and e-Commerce. Topics include: the different types of e-Business Models, e-Business Design, Development and Management; Online Monetary Transactions, Internet Marketing, Affiliate Programs, and e-Customer Relationship Management.
**(Prerequisite: MIS 211)**

### MIS 363–Special Topics in Information Systems

This course focuses on a new development or application of technology related to information systems. The intention is to provide a rapid response to current trends, with topic and content changing with each offering. Examples of topics which might be offered include: soft systems, intellectual property, e-government, or some special aspect of one of these technology trends, and their implications for information system development and use.
**(Prerequisite: MIS 312 & MIS 314)**

### MIS 422 – Information Systems Design & Implementation

This course introduces the student to the methodologies of design and Implementation of Information Systems. The topics covered in this course includes: Information systems development review, converting new system specification to design, designing effective output, designing effective input, Database design, designing effective user interface(GUI, I/O FORM DESIGN, ..etc.), designing accurate data entry procedures, design documentation, coding, testing, getting user approval, user training and system implementation
**(Prerequisite: MIS 321)**

### MIS 464 – Applied Research in MIS

In this course, students apply different computer algorithms and methodologies to one of the research - oriented real life problems. This gives the opportunity for individual student, to take the responsibility of executing an investigative research, with guidance from a supervisor. He/she will use knowledge and skills gained in earlier studied modules in working with his/her supervisor. Students will be required to plan work and meet deadlines. They also need to demonstrate the outcome of the investigation and write a comprehensive report. Students should enjoy the freedom of this experience.

**(Prerequisite: MIS462)**

### MIS 445 – Mobile Computing

This course introduce students to mobile computing; mobile computing platforms; wireless networks; architectures; security and management; mobile computing applications such as mobile messaging, mobile agents, and sensor applications. Students will come to understand the impact of mobile computing on organizations and the implications for management and business.

**(Prerequisite: MIS 240)**

### MIS 454 – MIS Ethics

This course aims to introduce students to the concepts of ethics related to information systems and their management, including fundamental concepts of ethics, ethical standards of information systems (IS) professionals and users, and ethical issues related to privacy, and computer and Internet crimes.

**(Prerequisite: MIS 240)**

### MIS 456 – Information Systems Project Management

This course discusses the processes, methods, techniques and tools to manage information systems projects. The course covers a systematic methodology for initiating, planning, executing, controlling, and closing projects. This course also acknowledges that project management involves both the use of resources from within the firm, as well as contracted from outside the organization.

**(Prerequisite: BA 241)**

### MIS 462 – Internship

The course is designed to provide management information systems students with the opportunity to gain experience in workplace settings and to translate classroom learning into practice. It focuses on reinforcing students' practical and transferable skills where further industry knowledge and skills necessary for professional advancement are acquired and developed. This course enables them to function well in a culturally diverse working environment. Additionally, it helps students reflect on the skills they are learning and the benefits gained from the internship experience.

**(Prerequisite: 90 Credit Hours)**

# Programme Elective Courses: (6 Credit hours/2 courses to be chosen from this group)

### MIS 210– Financial Information Systems

This course introduces the fundamental concepts of the information technology audit and control function. The main focus of this course is on understanding information controls, the types of controls and their impact on the organization, and how to manage and audit them. The concepts and techniques used in information technology audits will be presented. Students will learn the process of creating a control structure with goals and objectives, audit an information technology infrastructure against it, and establish a systematic remediation procedure for any inadequacies. The challenge of dealing with best practices, standards, and regulatory requirements governing information and controls is addressed.

**(Prerequisite: MIS 211 + ACF 101)**

### BA 258 – Organization Theory (E)

The course deals with the major topics and issues related to organizational theory that helps the student in understanding and analysing organizations. This course examines what an organization is and how it functions, why organizations exist, and what objectives do they pursue. It also review issues related to the life cycle of organizations: how do they grow and survive. The environment in which the organization operates is another

important topic. Additionally, the course includes theories and practical information about different types of organizational structures, organizational change, organizational culture and innovation within organizations scaling and research instrument design and sampling design.
**(Prerequisite: BA 109 + ENG 111)**

### BA 332 – Business Communication
The course deals with the basic concepts of written and oral business communications. This course focuses on the importance of communication process, its objectives and types. It enables students to achieve competencies in business writing, including good and bad news business letters, memoranda, electronic mail, persuasive messages and formal reports. The course promotes student capacity in using electronic communication and technology appropriate to contemporary business functions. Additionally, it paves the way for student acquisition of life- long learning skills.
**(Prerequisite: BA 109 + ENG 111)**

### MIS 436 – Web Applications Development
This course will introduce concepts in programming web application servers. We will study of the fundamental architectural elements of programming web sites that produce content dynamically. The primary technology introduced will be Java Servlets and Java Server Pages (JSPs), but we will also cover the related topics as necessary so that students may build significant applications.
**(Prerequisite: MIS 361)**

### MIS 465 – Business Intelligence
This course introduces the concepts of Business Intelligence together with its capabilities which include organizational memory capabilities, integration capabilities, presentation capabilities and Business Intelligence tools and techniques.
**(Prerequisite: MIS 355 + BA 108)**